Savannah River Operations Office Technical Qualification Program Phase I Assessment Report

Approved and Submitted by:

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W. Brumley, Phase I Assessment Team Leader   Date

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Executive Summary

The Department of Energy's (DOE) Technical Qualification Program was established in response to a Defense Nuclear Facility Safety Board observation that the level of federal scientific and technical expertise needed to effectively accomplish DOE's safety responsibilities at defense nuclear facilities was declining (recommendation 93-3). The Phase I Assessment was conducted to determine whether the Savannah River Operations Office (SR) is meeting the Technical Qualification Program objectives identified in Section 5.4 of DOE's revised 93-3 Implementation Plan. The assessment was conducted in accordance with the DOE Federal Technical Capability Program's "Technical Qualification Program Assessment Guidance and Criteria," dated July 1998. SR's program was evaluated against the seven objectives and associated criteria identified in that document as well as an additional SR-specific objective added by the team.

Overall, the team concluded that SR's Technical Qualification Program has been rigorously applied in a credible and conscientious manner. The program provides SR's technical staff with an improved ability to challenge contractor activities. Clearly, participants perceived the program to have most value in organizations where managers applied the program most rigorously and were very involved in the evaluation process.

The assessment team concluded that SR's program meets or exceeds most of the expectations set forth in Section 5.4 of DOE's revised 93-3 Implementation Plan. SR's program clearly embodies Technical Qualification Program principles. Specific roles and responsibilities are defined in SR's implementing procedure. SR's program does not require a rigorous job and task analysis be performed for each identified Technical Qualification Program position, although supervisors are clearly aware of job requirements. Related knowledge, skill, and ability elements are defined in the General Technical Base, Functional Area, and Facility-Specific Qualification Standards. Although a formal independent assessment system is not in place to measure technical competency, there is an effective system in place to measure completion of qualification requirements, and competency is evaluated by management and designated qualifying officials. Feedback mechanisms are included in the program. SR managers have implemented the program to meet SR mission needs. Appropriate positions are included in the program, although many participants perceive a disconnect between Functional Areas and their actual jobs. The technical competency of personnel has been maintained or upgraded. The level of technical competency of personnel who have completed the program is considered adequate and appropriate (and will be further evaluated in Phase II assessments; SR must ensure that the graded approach and flexibility afforded by the program is appropriately applied in all cases). The program identifies job-specific requirements that focus on rules, regulations, codes, standards, and guides necessary to carry out the mission needs. SR-specific programs are consistent with roles and responsibilities. The adequacy and relevancy of participant experience has been verified for staff positions (although the team found that reliance on equivalencies generally increased as the level of management increased, and some cases were noted where many competencies were signed off in one day). SR's procedure appropriately identifies a need for continuous training, but does not establish sufficient guidelines or criteria to ensure that over time, qualified participant competencies will be maintained or enhanced, and management had not provided specific guidance to staff in this regard.

The report includes recommendations for improvement directed to the SR Executive Technical Management Board.

Introduction.

The Department of Energy's (DOE) Technical Qualification Program (TQP) was established in response to a Defense Nuclear Facility Safety Board (DNFSB) observation that the level of federal scientific and technical expertise needed to effectively accomplish DOE's safety responsibilities at defense nuclear facilities was declining. DNFSB recommendation 93-3 was issued on June 1, 1993. DOE's initial 93-3 Implementation Plan was issued on November 3, 1993.

Four years into implementation, the DNFSB asked DOE to revise the Implementation Plan to ensure commitments would be met, would have the desired effect, and addressed changes occurring over the past four years. DOE issued its revised 93-3 Implementation plan on March 31, 1998. The revised Implementation Plan establishes specific TQP objectives to be met by each operations and program office. The first step in ensuring these objectives are met is to formally evaluate current programs against these objectives ("Phase I"). Phase I assessments will serve as the basis for revising Technical Qualification Programs, as appropriate. Phase II assessments will be conducted periodically after approved TQP revisions are in place to determine whether the program is functioning as intended.

The purpose of the Phase I Assessment is to determine whether the Savannah River Operations Office (SR) is meeting the TQP objectives identified in Section 5.4 of DOE's revised 93-3 Implementation Plan. This assessment is a deliverable under commitment 5.4.2 of the revised Plan.

Background.

As of September 1998, 215 employees were participating in SR's TQP, in 21 functional areas (Attachment 1). Over half (125) were qualified; 58 were scheduled to complete the program by December 1998; 14 were scheduled to complete the program by May 1999, and 18 were due after May 1999. Approximately half were participating as Facility Representatives, Nuclear System Safety specialists, or Senior Technical Safety Managers.

Scope and Methodology.

The assessment included each of the nine SR organizations with TQP participants[1]. SR's 40 Facility Representatives were excluded from the assessment because SR's Facility Representative Program was established prior to implementation of the remaining TQP elements and operated under a separate SR procedure.

The assessment was conducted in accordance with the DOE Federal Technical Capability Program's "Technical Qualification Program Assessment Guidance and Criteria," dated July 1998. SR's TQP was evaluated against the seven TQP objectives and associated criteria identified in that document and an additional SR-specific objective added by the team (Attachment 2). The team reviewed and analyzed applicable criteria, training and qualification records, and other supporting documentation (Attachment 3). The team conducted interviews with a total of 85 managers, non-management participants, and administrative support personnel (Attachment 3). The majority of the fieldwork was conducted between September 21-23, 1998.

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[1] Office of the Manager, Assistant Manager for Business & Logistics, Assistant Manager for Environmental Quality, Assistant Manager for Health, Safety & Technical Support, Assistant Manager for High Level Waste, Assistant Manager for Material & Facility Stabilization, Assistant Manager for National Security, Office of Safeguards & Security, and Assistant Manager for Science, Technology & Business Development.

The SR Phase I Assessment team was led by William Brumley, Deputy Assistant Manager for National Security. The team included William Brasel, Scott DeClue, and Lauren Lovick from DOE-SR; David Roth from DOE-Headquarters (Assistant Office Director for Training and Professional Development, HR-31); and Johnnie Guelker from the DOE Amarillo Area Office (Lead, Engineering Team).

RESULTS

The following section addresses the eight TQP objectives and criteria detailed in Attachment 2.

TQP-1: Demonstration of Competence. "The TQP clearly identifies and documents the process used to demonstrate employee technical competence."

SR has an established implementing procedure in place, SRIP 361.5, "Federal Technical Workforce Training and Qualification," (rev. 4/27/97). As discussed below in TQP-3, this procedure defines the Technical Qualification Program and provides detailed guidance on identification of participants and other aspects of the qualification process. The procedure is available on-line to SR management and staff as part of the SR directives home page.

SR personnel providing management direction or oversight that could impact the safe operation of defense nuclear facility have been identified as participants in the TQP. The team found that SR managers tended to make conservative decisions by including, rather than excluding, employees in the program where definitions were unclear. Senior management commitment to the program, and the overall rigor with which the process has been applied, with significant management involvement in the evaluation/check-out process in most organizations, is a strength contributing to the effectiveness of SR's program.

In accordance with SR's procedure, formal records have been established for TQP participants. While qualification is in progress, the original Technical Qualification Record is maintained by the participant. Once qualification is complete, centralized TQP records are maintained by the Training & Development Management Group (TDMG) with participants' individual training files. The SR procedure requires that participants and supervisors document on individual the TQR how competencies will be met (e.g., self-study, OJT, formal training, or equivalency). The qualifying official verifies that the competency was achieved. A review of TQRs disclosed that most, but not all, records indicated how competencies will be or were met. SR's automated Training Requirements Matrix (i.e., employee individual development plans) also documents the formal training courses needed to satisfy qualification requirements, including target, scheduled, and completed dates. The SR procedure requires line organizations to provide the TDMG with updated copies of TQRs every 6 months; these are not always provided, and some managers considered this administratively burdensome without adding value. TDMG's centralized listing of participants was also not completely accurate because the group was not always notified of personnel changes between divisions or changes in functional areas in a timely manner.

In November 1998, SR will initiate a new Performance Management System. The revised system is designed to enhance organizational focus on employee qualification and development. The performance appraisal process incorporates identification of developmental areas and competencies, and identification of specific mechanisms to achieve desired goals. Although the new Performance and Development Plan does not explicitly reference the formal Technical Qualification Program, it does specifically require supervisors to evaluate whether employees "achieve and maintain applicable position qualification requirements," and supervisors are

evaluated on whether they "determine and drive completion of employee qualification requirements" and "foster employee professional and technical development." As a result of other recent revisions to the human resource systems, the TQP is better integrated with position descriptions and vacancy announcements. SR position descriptions have been revised to contain the following generic statement: "Maintain and improve individual technical and professional competencies required to satisfactorily perform the duties of the position… completion of the Technical Qualification Program… may be required or encouraged to enhance competence." In addition, position descriptions contain a statement detailing specific requirements that must be met if the position requires participation in the TQP. And, as cited during interviews with several Assistant Managers, recent revisions to SR's awards process now allow managers to reward completion of the TQP process with cash or time-off awards.

TQP-2: Competency Levels. "Competency requirements are clearly defined and consistent with applicable industry standards for similar occupations."

SR used Department-wide standards for General Technical Base and Functional Area competency requirements. These standards include clearly defined knowledge, skills, and abilities. SR organizations also developed applicable Facility-Specific competency requirements. Division Directors and Assistant Managers utilized subject matter experts in developing Facility-Specific standards. Management and non-management participants consistently indicated they were generally comfortable with the General Technical Base, Functional Area, and Facility-Specific standards, except for the Senior Technical Safety Manager Functional Area standard. Participants generally felt most value was attained from qualifying to the Facility-Specific standards.

As discussed below in TQP-5, attainment of related professional certifications has not been effectively integrated into the TQP; the team notes this is as a Department-wide issue. At present there is no clear incentive for obtaining external certification.

TQP-3: Plans and Procedures. "SR has implemented plans and/or procedures to govern administration of the Technical Qualification Program."

SR has an established implementing procedure in place, SRIP 361.5, "Federal Technical Workforce Training and Qualification," (revision effective 4/27/97). This procedure defines the Technical Qualification Program. The procedure is readily available on-line to all SR employees as part of the SR directives home page. The procedure identifies the process for selecting participants, including a step-by-step flowchart. The procedure provides clear and detailed guidance for implementing the program in accordance with the DOE 93-3 Implementation Plan, applicable DOE Orders and other guidance, and interfacing SR procedures and guidance (such as training program and course administration, and guide to good practice for the development of test items). In addition to detailing the processes, a separate section of the procedure clarifies roles and responsibilities for the SR Manager, second level supervisors, immediate supervisors, qualification candidates, qualified employees, qualifying officials, and human resources and training administrative support personnel.

The assessment team also found that a new manual section merging the Federal TQP procedure and the SR Facility Representative Training and Qualification program procedure had been developed (SRM 300.1.1AA Section 6.1), as part of a human resources procedure manual. Although signed by the SR Manager on May 20, 1998, the manual section had not been formally

established as part of SR's directive system and the team found there was considerable confusion regarding the role of the manual versus the existing site implementing procedures.

The one area where roles and responsibilities were not clearly defined was overall site-wide ownership of the program. The commitment of SR's senior management—the Manager, Deputy Manager, and all Assistant Managers—was identified as a significant attribute of SR's program. Assistant Managers felt clear ownership of the program for their organizations. At present, there was no clear line ownership from a site-wide perspective (e.g., to ensure that substantive programmatic issues were addressed and cross-organizational efficiencies were realized). However, in April 1998, SR established an Executive Technical Management Board consisting of all senior line managers and ex-officio participation from senior managers providing critical administrative support to the line. One of the Board's four focus areas is "improvement and maintenance of the Technical Capability of the Federal Workforce." Accordingly, the recommendations in this report are addressed to this Board to foster corporate line ownership of SR's TQP.

There was some disconnect between line organizations and the training support organization in communicating the value of administrative requirements and ensuring that the line received value-added support. It was recognized that the training office has been under significant staffing pressure; however, systems and requirements have not been evaluated to determine whether new ways of doing business may be more effective to meet line needs, given staffing shortages and increasing pressure on training and travel budgets (e.g., changing SR's training culture to maximize use of on-site expertise and experience).

TQP-4: Qualification Tailored to Work Activities. "The program includes identification of unique DOE and position-specific work activities, and the knowledge and skills necessary to accomplish that work."

SR's process was viewed as excellent for ensuring that new hires are effectively developed, with less consistently clear effectiveness for staff who were hired as experts and/or have developed competency at SR. Many participants who had been hired as experts or who had developed competency through their experience at SR did not believe the process itself contributed to a significant increase in technical competence. However, the team concluded that overall, the TQP provides SR's technical staff with an improved ability to challenge contractor activities.

SR's current program is flexible enough to allow line managers to tailor the program to meet mission needs. Managers used this flexibility (e.g., by adding competencies to the Facility-Specific qualification standards to fill gaps identified in the General Technical Base and Functional Area standards). The team followed-up on Functional Areas that appeared to be inconsistent with organizational assignments, and found defensible rationale for these designations in all cases (e.g., a High Level Waste employee in the Environmental Restoration Functional Area contributed this expertise to the tank closure team). A number of participants expressed concern that project management was not available as a stand-alone functional area. This was perceived to result in a disconnect between the assigned functional area/associated competencies and the employees actual job. In many cases the available functional areas were not perceived to clearly fit with actual jobs, and a "best fit" approach to the employee's job and/or background was used. DOE's revised Implementation Plan provides managers with additional flexibility by eliminating the requirement for use of specific Functional Areas, although this is not reflected in SR's procedure.

The team also noted that other technical qualifications were in use at SR but were not part of the 93-3 Technical Qualification Program (e.g., Albuquerque Quality Assurance certification, National Environmental Policy Act certification).

TQP-5: Credit for Existing Technical Qualification Programs. "The program is structured to allow credit, where appropriate, for other technical qualification program accomplishments."

SR's established procedure allows credit (equivalencies) to be granted for previous training, education, experience, and completion of other qualification/certification programs, where appropriate. The procedure defines appropriate documentation acceptable for training, certification, and work-related equivalencies, and requires two levels of supervisory approval.

Although equivalencies are allowed by procedure, some managers chose to ensure staff competency by requiring self-study, formal training, or OJT for all competencies, validated by oral or written checkout. In other cases, over-reliance on equivalencies, some with poor documentation, may call into question the validity of the qualification process. In addition, the team found that Senior Technical Safety Managers' liberal use of equivalencies was not consistent with the generally limited use of equivalencies by their staff. The team believes this was largely due to the Senior Technical Safety Manager qualification standard's focus on general management rather than technical competencies.

As noted under TQP-2, attainment of related professional certifications has not been effectively integrated into the TQP. However, SR management strongly supports attainment of advanced degrees and professional certifications. Two on-site graduate programs have been available for several years (Master of Environmental Sciences and Master of Environmental and Earth Resource Management), and several courses have been brought in to meet employee professional credential needs (Registered Environmental Manager; Certified Hazardous Material Manager; Certified Safety Professional; and Certified Energy Manager).

TQP-6: Transportability. "Competency requirements identified as having DOE-wide applicability are transferable."

SR's TQP is based on the existing Department-wide model, uses Department-wide General Technical Base and Functional Area standards, and was developed in accordance with Headquarters guidance. Based on the evident rigor with which this program has been implemented at SR, the team concluded that qualified SR staff should easily be transportable to other sites, to the extent that the Technical Qualification Programs at these sites are also based on the Department-wide model. If SR chooses to change the program based on newly flexible guidance, transportability may become an issue in the future.

TQP-7: Measurable. "The program contains sufficient rigor to demonstrate compliance with TQP principles."

SR's program clearly contains sufficient rigor to demonstrate compliance with TQP principles. Overall, the team found that the program was applied in a credible and conscientious manner. Prior to initiating the Phase I Assessment, the team concluded that a formal evaluation of the "adequacy and appropriateness of the technical competency of personnel who have completed the program" would be deferred until the Phase II Assessment. However, managers consistently indicated they were confident of the competency of participants who had completed the program.

A potential vulnerability exists in ensuring the graded approach and flexibility afforded by the program is appropriately applied across all SR organizations by supervisors and other qualifying

officials. In reviewing records, for example, the team found some cases where many competencies were signed off on in one day, significant reliance on equivalencies, and final qualification approvals obtained prior to completion of all competencies. While in some cases appropriate justifications for these situations can be made, they call into question the rigor of the evaluation process. On the positive side, exemptions were rarely used.

The team found a strong positive relationship between the rigor applied to the program in an organization and staff perception of the program's value. Employees in organizations where the program was implemented rigorously consistently indicated the program was valuable. They identified benefits beyond enhanced competence—such as improved supervisory communications, improved communication between division technical staff, and increased interaction with a broader network of technically competent individuals (particularly, qualifying officials and other employees in the same functional area).

Numerous mechanisms were available to provide continuous improvement feedback on SR's TQP. The Training & Development Management Group (TDMG) holds annual Town Hall Meetings to solicit feedback on the TQP and other training services. Employees must complete a Training Evaluation Form (submitted to the TDMG) prior to receiving credit for formal training classes. Some organizations solicited feedback from their employees on the TQP and are in the process of evaluating this feedback to improve their programs. Further, SR utilized lessons-learned from development and implementation of its Facility Representative program in establishing the full TQP, and the Facility Representative program has been previously evaluated. However, this Phase I Assessment is the first systematic assessment of the overall TQP.

SR's focus has appropriately been on identifying and qualifying technical staff. At this time, with a majority of participants qualified, SR management attention is beginning to focus on the need for continuing training requirements. The Department-wide revised 93-3 Implementation Plan does not provide specific guidance for continuing training. SR's procedure meets the intent of the Implementation Plan by identifying the need for continuing training, but does not provide specific guidance on type or amount of training necessary to ensure competencies are maintained or enhanced over time.

SRTQP-8: Planning (Critical Technical Capability Preservation). "A system is in place to ensure the availability of competent personnel to fill Critical Technical Capability positions over the next five years."

SR does not yet have a formal system in place to ensure the availability of competent personnel to fill Critical Technical Capability positions over the next 5 years, but this is a well-recognized need and significant management attention is focused in this area.

During the assessment, managers indicated the recently developed Critical Technical Capability list and TQP were not sufficiently aligned. Managers recognized that SR's TQP was well-established, with functional areas defined and many participants qualified, prior to initiation of the Critical Technical Capability effort. However, managers generally felt SR's Critical Technical Capability list would benefit from reevaluation and better definition, particularly if it will stand as SR's goal for ensuring preservation of needed technical capabilities. SR has established a separate competitive category to preserve Facility Representative technical capability in the event of a Reduction in Force. Management determined that this approach would not be appropriate for SR's other Critical Technical Capability positions and will utilize

other methods, including the TQP and administrative flexibilities, to ensure these capabilities are preserved and appropriately considered in strategic and workforce planning.

The TQP can be used to assist line managers, individually and for the operations office as a whole, in future planning. Metrics are available or can be developed from program data (e.g., estimated employee retention rate by functional area over the next 5 years) to aid in succession planning and support development of a staffing management plan.

Summary of Results and Recommendations

Overall, the team concluded that SR's Technical Qualification Program has been rigorously applied in a credible and conscientious manner. The program provides SR's technical staff with an improved ability to challenge contractor activities. Clearly, participants perceived the program to have most value in organizations whose managers applied the program most rigorously and were very involved in the evaluation process.

Over the past several years, expectations of—and demands on—SR's federal staff have increased significantly. SR's TQP is one key element representative of these increasing expectations and demands. Other factors include a significant reduction in support service contracting staffing and significant pressure to downsize federal staffing with no relief from, and probable increases in, existing mission requirements. As evidenced by the SR TQP, managers and staff have risen to meet the challenge of these increased expectations.

In considering the following recommendations, the team cautions that appropriate SR technical staff are either qualified or currently in process of qualifying in the TQP. Given limited opportunities for new hires, any changes to the program should be cost-effective and focused on efficiently and effectively developing and maintaining technical competency.

Recommendations. The team recommends that the SR Executive Technical Management Board evaluate the following areas requiring attention from a site-wide perspective:

- Integrating the TQP with Critical Technical Capability initiatives;
- Revising SR's procedure to take full advantage of the flexibility afforded by the Department's revised 93-3 Implementation Plan to develop functional areas tailored to SR needs (e.g., Authorization Basis Specialist or Program Manager);
- Improving the technical benefit obtained from the Senior Technical Safety Manager Functional Area;
- Ensuring appropriate use of equivalencies in all organizations;
- Establishing TQP participant continuing education guidelines (similar to requirements for industry standard professional credentials and licenses);
- Identifying ways to better integrate external certifications and licenses; and
- Integrating non-93-3 technical qualification programs in use at SR (e.g., Albuquerque Quality Assurance certification, NEPA) with the 93-3 Technical Qualification Program.

SR Technical Qualification Program Functional Areas

The following 21 Functional Areas are currently in use at SR:

- Senior Technical Safety Manager
- Facility Maintenance Management
- Environmental Compliance
- Nuclear Systems Safety
- Mechanical Systems
- Facility Representative
- Fire Protection
- Instrument and Control
- Emergency Management
- Waste Management
- Industrial Hygiene
- Technical Training
- Radiation Protection
- Civil/Structural Engineering
- Safeguards & Security
- Chemical Processing
- Occupational Safety
- Construction Management & Engineering
- Electrical Systems
- Environmental Restoration
- Quality Assurance

Assessment Objectives and Criteria

This assessment was based on the DOE Federal Technical Capability Program guidance document, "Technical Qualification Program Assessment Guidance and Criteria," dated July 1998. The guidance document identifies seven TQP objectives (TQP 1-7) and supporting criteria. In addition to these DOE-wide criteria, the SR team has included an additional area of emphasis (TQP-8) focused on planning (Critical Technical Capability preservation).

TQP-1: Demonstration of Competence. The program clearly identifies and documents the process used to demonstrate employee technical competence.

1.1   At a minimum, personnel providing management direction or oversight that could impact the safe operation of a defense nuclear facility have been identified as participants in the Technical Qualification Program.

1.2   Individual Development Plans (IDPs), training plans, technical qualification records, or other related documents are updated to reflect the activities that each individual shall participate in to satisfy competencies.

1.3   A formal evaluation process is in place to objectively measure the technical competency of personnel. The rigor of the evaluation process is commensurate with the responsibilities of the position.

1.4   The Technical Qualification Program is integrated with personnel-related activities such as position descriptions, vacancy announcements, recruiting, and performance appraisals.

TQP-2: Competency Levels: Competency requirements are clearly defined and consistent with applicable industry standards for similar occupations.

2.1   Competency requirements include clearly defined knowledge, skill, and ability elements.

2.2   Subject matter experts are involved in establishing competency.

2.3   Consideration of related professional certification requirements is included in the program as applicable.

2.4   Competency requirements are identified in the areas of Basic Technical Knowledge, Technical Discipline Competency, and Site or Facility Specific Competency.

TQP-3: Plans and Procedures: Plans and/or procedures are developed and implemented to govern the administration of the program.

3.1   The Technical Qualification Program has the commitment of senior management.

3.2   Written procedures that adequately define the processes and requirements to implement the Technical Qualification Program are in place.

3.3   Roles and responsibilities for the implementation of the Technical Qualification Program are clearly defined and understood by all involved.

3.4   The procedures that govern the implementation of the Technical Qualification Program are understood by all involved and are being implemented as written.

3.5   A training and qualification records system is established for each employee in the Technical Qualification Program.

TQP-4: Qualification Tailored to Work Activities: The program includes the identification of unique Department and position-specific work activities, and the knowledge and skills necessary to accomplish that work.

4.1 An analysis has been performed to identify the related knowledge, skill and ability elements to accomplish the duties and responsibilities for each Technical Qualification Program functional area or position.

4.2 The program includes job-specific requirements related to the rules, regulations, codes, standards, and guides necessary to carry out the mission of the office.

4.3 The program supports the mission needs of the office.

TQP-5: Credit for Existing Technical Qualification Program(s): The program is structured to allow credit, where appropriate, for other technical qualification program accomplishments.

5.1 Credit (equivalency) is granted for previous training, education, experience and completion of related qualification/certification programs, where applicable.

5.2 Equivalency is granted based upon a review and verification of objective evidence such as transcripts, course certificates, test scores or on-the-job experience.

5.3 Equivalencies are validated, approved and documented in a formal manner.

TQP-6: Transportability: Competency requirements that are identified as having Department-wide applicability are transferable.

6.1 The program includes all of the competencies that have been identified as having Department-wide applicability.

6.2 Formal documentation of the completion of Department-wide competencies is maintained in a manner that will allow for easy transferability.

6.3 *This criterion is addressed as item 1.4.*

TQP-7: Measurable: The program contains sufficient rigor to demonstrate compliance to the principles..

7.1 The technical competency of personnel who have completed the requirements the Technical Qualification Program is adequate and appropriate.

7.2 The program allows for continuous feedback and periodic evaluation to ensure that it meets the needs of the Department and the mission(s) of the office.

7.3 The Program provides provisions for continuing training.

TQP-8: Planning (Critical Technical Capability Preservation). SR has a system in place to ensure the availability of competent personnel to fill Critical Technical Capability positions over the next five years.

8.1 SR has a long-range plan to identify and develop needed critical skills.

8.2 SR's TQP is integrated with strategic planning and workforce development.

Documents Reviewed and Personnel Interviewed

Documents Reviewed

- Savannah River Implementing Procedure 361.5, "Federal Technical Workforce Training and Qualification," (rev. 4/27/97).
- Savannah River Manual 300.1.1A, Chapter 6, Section 6.1, "Technical Training and Qualification Programs," (signed by SR Manager 5/20/98).
- DOE Revised Implementation Plan for Improving DOE Technical Capability in Defense Nuclear Facilities Programs (Recommendation 93-3), Rev. 1.d, March 31, 1998.
- Draft Procedure SRM 300.1.1A Chapter X, "SR Performance Management Process" including sample individual Performance and Development Plan.
- Human Resources Management & Development Division Phase I 93-3 Assessment Talking Paper.
- Memo, Greg Rudy (Manager) to Distribution, "Savannah River Operations Office Executive Technical Management Board," April 22, 1998.
- Memo, Frank McCoy (Deputy Manager and SR Federal Technical Capability Agent) to Thomas Evans, "Savannah River Operations Office Critical Technical Capabilities Retention," August 12, 1998.
- Selected Functional Area and Facility-Specific Standards.
- Training Management & Development Group listing of 93-3 Personnel.
- Selected Technical Qualification Records:

1. Alemon, Sue		23. McGuire, Patrick
2. Anderson, John		24. Nichols, Gordon
3. Barber, Don		25. Peterson, Gary
4. Bilyue, Robert		26. Radford, Charles
5. Blake, Don		27. Robinson, Ray
6. Borba, Gary		28. Ross, Sherri
7. Christenbury, Glenn		29. Schepens, Roy
8. Dearolph, Doug		30. Shelt, Steve
9. Dholokia, Mike		31. Shepard, Norman
10. Dumas, Jere		32. Sidey, Kim
11. Edwards, Christina		33. Sjostrom, Len
12. Faubert, David		34. Smith, Timothy
13. Folk, James		35. Tam, Lawrence
14. Harris, Charles		36. Taylor, Jerald
15. Heenan, Thomas		37. Temple, T.
16. Hixon, Doris		38. Temples, T. J.
17. Jackson, Donna		39. Vest, Gary
18. Johnson, Sandra		40. Waltzer, Karl
19. Kekacs, James		41. Williamson, David
20. Kirkland, Patricia		42. Wilmot, Ed
21. Langford, Mary		43. Woodworth, Marc
22. McAlhany, Sachiko		44. Yaffee, Gary

Personnel Interviewed (85)

The assessment team interviewed Assistant Managers/Office Directors and their training liaisons; Division Directors; and non-management participants in all organizations with TQP participants. The team also interviewed human resource and training administrative support personnel. Targeted Lines of Inquiry were developed for each group (management, non-management participants, and administrative support).

	Name	**Position**	**Organization**	**Functional Area**
1.	Adams, Angela	Staff	Health, Safety & Technical Support	Facility Maintenance Management
2.	Allison, Jeffrey	Deputy Assistant Manager	Health, Safety & Technical Support	STSM
3.	Anderson, Charles	Division Director	Material & Facility Stabilization	STSM
4.	Anderson, Cynthia	Division Director	Environmental Quality Environmental Restoration Division	STSM
5.	Anderson, John	Acting Assistant Manager	Material & Facility Stabilization	STSM
6.	Armstrong, Brent	Assistant Manager	Business & Logistics	N/A
7.	Baker, Robert	Staff	Environmental Quality	(EQ ER)
8.	Besecker, Ken	Division Director	National Security	N/A
9.	Blanco, Soni	Staff	High Level Waste	Mechanical Systems
10.	Boyd, Gaile	Staff/Training Liaison	High Level Waste	N/A
11.	Boyll, David	Staff	Health, Safety & Technical Support	Fire Protection
12.	Brown, F. D.	Staff	Health, Safety & Technical Support	Emergency Management
13.	Burke, Pat	Staff	Site Services Division	TBD
14.	Cannon, Scott	Staff	Environmental Quality	Waste Management
15.	Chambers, Billy	Staff	Material & Facility Stabilization	Nuclear Safety Systems
16.	Christenbuy, Glen	Staff	High Level Waste	Mechanical Systems
17.	Cohen, J. P.	Staff	Health, Safety & Technical Support	Industrial Hygiene
18.	Czuchna, Craig	Staff	National Security	Environmental Compliance
19.	Danker, Steve	Staff	Health, Safety & Technical Support	(HSTS TQP)
20.	Dayani, Mosi	Staff	Health, Safety & Technical Support	Nuclear Safety Systems
21.	Dearolph, Doug	Staff	Health, Safety & Technical Support	Facility Representative

	Name	Position	Organization	Functional Area
22.	Dholokia, Mike	Staff	High Level Waste	Civil/Structural
23.	Doswell, Alice	Supervisory Physical Scientist	Health, Safety & Technical Support	STSM
24.	Dumas, Jere	Staff	Safeguards & Security	Safeguards & Security
25.	Edwards, Christina	Staff	Health, Safety & Technical Support	Emergency Management
26.	Everatt, Carl	Division Director	High Level Waste Operations Division	STSM
27.	Frazer, William	Staff	Health, Safety & Technical Support	Radiation Protection
28.	Frizzell, Terry	Division Director	Humans Resources Management & Development Division	N/A
29.	Gillas, Dawn	Staff	Material & Facility Stabilization	Nuclear Safety Systems
30.	Gnann, Howard	Division Director	High Level Waste Programs Division	STSM
31.	Goehle, Robert	Staff	National Security	Construction Management & Engineering
32.	Gould, A. Ben	Division Director	Environmental Quality Environmental Compliance Division	STSM
33.	Grainger, Drew	Staff	Health, Safety & Technical Support	(HSTS TQP)
34.	Guerry, James	Staff	High Level Waste	Electrical Systems
35.	Gunter, Alan	Staff	Material & Facility Stabilization	Nuclear Safety Systems
36.	Gutmann, Thomas	Staff	High Level Waste	Mechanical Systems
37.	Hannah, Ray	Staff	High Level Waste	Environmental Restoration
38.	Heenan, Thomas	Assistant Manager	Environmental Quality	STSM
39.	Hickman, Jerry	Staff	Safeguards & Security	Safeguards & Security
40.	Hixon, Doris	Participant and Training Administrator	Training Management & Development Group	Technical Training
41.	Hooker, Karen	Division Director	Environmental Quality Program Management Division	STSM
42.	Hoover, Gary	Staff	Environmental Quality	Environmental Compliance
43.	Johnson, Sandy	Division Director	Material & Facility Stabilization	STSM
44.	Kirkland, Patricia	Staff	Science, Technology & Business Development	Waste Management
45.	Ling, Larry	Staff	High Level Waste	Chemical Processing
46.	Little, Gary	Staff/Training Liaison	Environmental Quality	N/A

	Name	Position	Organization	Functional Area
47.	Lyde, Willard	Human Resource Specialist	Organization & Workforce Management Group	N/A
48.	Massingill, Stan	Staff	Environmental Quality	Waste Management
49.	McAlhany, Sachiko	Staff	Material & Facility Stabilization	Nuclear Safety Systems
50.	McCoy, Frank	Deputy Manager	Office of the Manager	STSM
51.	Middleton, Seaward	Staff	High Level Waste	Emergency Management
52.	Miller, Guy	Staff	National Security	Facility Maintenance Management
53.	Montgomery, Terry	Staff	Science, Technology & Business Development	Civil/Structural Engineering
54.	Nelson, Dyanna	Staff	Science, Technology & Business Development	TBD
55.	Newell, Joseph	Staff	National Security	Nuclear Safety Systems
56.	Nichols, Gordon	Division Director	Material & Facility Stabilization	STSM
57.	Noll, William	Division Director	Environmental Quality Solid Waste Division	STSM
58.	O'Rear, Michael	Division Director	Material & Facility Stabilization	STSM
59.	Ogletree, Laurence	Office Director	Safeguard& Security	N/A
60.	Peterson, Gary	Staff	Material & Facility Stabilization	Nuclear Safety Systems
61.	Powell, Dianne	Staff/Training Liaison	National Security	N/A
62.	Pullen, John	Staff	Health, Safety & Technical Support	Nuclear Safety Systems
63.	Reames, Marilyn	Staff	Health, Safety & Technical Support	(HSTS TQP)
64.	Richardson, Wayne	Division Director	National Security	STSM
65.	Rudy, Greg	Manager	Office of the Manager	N/A
66.	Schepens, Roy	Acting Assistant Manager	High Level Waste	STSM
67.	Shelt, Steve	Staff	Safeguards & Security	Safeguards & Security
68.	Sidey, Kim	Staff	Material & Facility Stabilization	Nuclear Safety Systems
69.	Singh, L. P.	Staff	Health, Safety & Technical Support	Industrial Hygiene
70.	Smartt, John	Staff	Health, Safety & Technical Support	Nuclear Safety Systems
71.	Smith, Mark	Staff	Health, Safety & Technical Support	Nuclear Safety Systems
72.	Smith, Tim	Staff	Material & Facility Stabilization	Nuclear Safety Systems
73.	Snyder, Larry	Division Director	Site Services Division	STSM

	Name	Position	Organization	Functional Area
74.	Spader, Bill	Division Director	High Level Waste Engineering Division	STSM
75.	Spears, T. J.	Deputy Assistant Manager	Science, Technology & Business Development	N/A
76.	Taylor, Jerry	Staff	Material & Facility Stabilization	Technical Training
77.	Temples, Tom	Staff	High Level Waste	Nuclear Safety Systems
78.	Temples, Tom J.	Staff	Environmental Quality	Environmental Restoration
79.	Thames, Ken	Staff	Health, Safety & Technical Support	Nuclear Safety Systems
80.	Whetsell, Dave	Staff	National Security	Facility Maintenance Management
81.	Whitaker, Wade	Staff	Environmental Quality	Environmental Compliance
82.	Williams, Thomas	Division Director	Safeguards & Security Safeguards & Evaluation Division	N/A
83.	Willoner, Terry	Staff	National Security	Mechanical Systems
84.	Wilmot, Ed	Assistant Manager	National Security	STSM
85.	Woodworth, Marc	Staff	Material & Facility Stabilization	Nuclear Safety Systems